## BUSINESS MEETING

BEFORE THE

## CALIFORNIA ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION

In the Matter of:
Business Meeting

CALIFORNIA ENERGY COMMISSION

HEARING ROOM A

1516 NINTH STREET

SACRAMENTO, CALIFORNIA

WEDNESDAY, OCTOBER 9, 2002 10:06 A.M.

Reported by: Peter Petty Contract No. 150-01-006

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COMMISSIONERS PRESENT

William J. Keese, Chairman

Robert Pernell

Arthur H. Rosenfeld

James D. Boyd

John L. Geesman

STAFF PRESENT

Steve Larson, Executive Director

Jonathan Blees, Assistant Chief Counsel

Betty McCann, Secretariat

Don Kondoleon

Valentino Tiangco

Elaine Sison-Lebrilla

John Beyer

Joseph O'Hagan

Claudia Orlando

Sherry Stoner

Tim Schmelzer

Marwan Masri

PUBLIC ADVISER

Grace Bos

ALSO PRESENT

Ed Smeloff

San Francisco Public Utilities Commission

ALSO PRESENT

Jared Blumenfeld City and County of San Francisco

Dave Hawkins California Independent System Operator

Greg Karras
Communities for a Better Environment

Mike Carroll, Attorney Latham and Watkins Mirant Corporation

Janie Painter Save Medicine Lake Coalition

Robert Carr Jefferson Democratic Club of Siskiyou County

Peggy Reich Mt. Shasta Bioregional Ecology Center

Michelle Berbitschevsky Native Coalition for Medicine Lake Highlands Defense

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1	PROCEEDINGS
2	10:06 a.m
3	CHAIRMAN KEESE: Call this meeting of
4	the Energy Commission to order. Mr. Rosenfeld,
5	would you lead us in the Pledge, please.
6	(Whereupon the Pledge of Allegiance was
7	recited in unison.)
8	CHAIRMAN KEESE:
9	CHAIRMAN KEESE: Good morning, everyone
10	May I have a motion on the consent
11	calendar?
12	COMMISSIONER BOYD: So moved.
13	CHAIRMAN KEESE: Motion, Commissioner
14	Boyd.
15	COMMISSIONER ROSENFELD: Second.
16	CHAIRMAN KEESE: Second, Commissioner
17	Rosenfeld.
18	All in favor?
19	(Ayes.)
20	CHAIRMAN KEESE: Adopted four to
21	nothing.
22	We'll take up item 2, which is the San
23	Francisco Electricity Resource Plan.
24	Informational presentation by Mr. Smeloff. Good
25	morning.

1	MR. SMELOFF: Good morning, Mr. Chairman
2	and Commissioners. Good to see my long-time
3	friends here, be back in Sacramento. And I want
4	to thank Commissioner Rosenfeld for offering the
5	invitation to be here to share with you our
6	electricity resource plan.
7	I want to introduce the Director of the
8	Department of the Environment for San Francisco,
9	Jared Blumenfeld. The plan that we're going to
10	present to you is a joint endeavor of both the San
11	Francisco Public Utilities Commission where I
12	work, and the Department of the Environment.
13	Going to have Mr. Blumenfeld initiate
14	this and explain the genesis of the plan, the
15	process that we used in its development, and where
16	we're going with this.
17	MR. BLUMENFELD: Thanks, Ed; and thanks,
18	again, to the Commissioners for hosting this
19	informational session.
20	San Francisco, the City and County of
21	San Francisco is facing a twin crisis. The first
22	one is an environmental justice crisis that is
23	ongoing. The second, which we want to avert, is
24	an upcoming electricity crisis.

25 The PUC, the San Francisco Public

1	Utilities Commission and the Department of
2	Environment engaged in this process at the behest
3	of the Board of Supervisors.

In May 2001 the Board of San Francisco passed a unanimous resolution called the human health and environmental protection for new electricity generation ordinance.

And basically it asked the two departments to come together to develop a plan for all feasible alternatives to replace fossil fuel generation in the City.

The plan identifies a critical energy shortfall that may hit San Francisco within the next five years, and provides a means to overcome this shortfall while shutting down polluting Hunter's Point Power Plant.

Now, often we think of energy and electricity in very dry terms, but at the end of the day when the lights are turned on here or in San Francisco, they have an impact. And in San Francisco that impact is in the southeast of our City, the Bayview community. And there's really a health and environmental justice emergency that is there that's ongoing, that represents itself through both elevated asthma and cancer rates that

1	really is unacceptable in a city like San
2	Francisco, or in fact, any city in the country.
3	In the long run the plan proposes that
4	San Francisco rely on nonpolluting means to meet
5	its power needs through aggressive conservation
6	efforts and efficiency and renewable energy.
7	Because we know that public support is
8	critical to the success of any plan we developed
9	the electricity resource plan as part of a
10	community process. I think this is a real
11	evolution of planning. We can't do things in
12	isolation. The community had very strong and very
13	well articulated views about what they see as the
14	future of electricity planning in San Francisco.
15	I had a guest over from England. They
16	really couldn't believe the level of civic
17	involvement. We were out at a meeting on a
18	Saturday morning in the Bayview. There were over
19	50 people there that came to express their views.
20	And they're really very well educated views on
21	electricity generation. So the community has been

The process was goal-driven, so 23 24 basically we had over 17 public meetings. We went out and got people to articulate what they thought 25

a really key stakeholder in this whole process.

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1 the goals of this process should be.
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2 So the first one was to maximize energy 3 efficiency. The second was to develop renewable power. The third is to assure reliable power. 4 5 The fourth was to support affordable electricity bills. The fifth was to reduce air pollution and 7 prevent other environmental impacts. The sixth was to support environmental justice. The seventh 8 9 was to develop the local economy. And the eighth 10 was to increase local control over energy 11 resources. So, kind of the context of this whole 12 13

So, kind of the context of this whole plan is that it was very collaborative. We worked with the administration of Mayor Willy Brown, we worked with the board of supervisors, and we worked with the community.

And as we've moved forward, as I'll elucidate in a few minutes, we've also been working very closely with the ISO and members of the CEC Staff at the same time.

The electricity resource plan aims to replace San Francisco's dependence on fossil fuel burning power plant with clean, renewable sources of energy.

25 Some of the renewable projects proposed

1 in the plan include a football-sized field solar

- 2 photovoltaic system at the new Moscone Center,
- 3 which actually will start production and is under
- 4 Ed's shop in the next month. And a second is to
- 5 have solar installation at the southeast
- 6 wastewater treatment facility.
- 7 As you may be aware, San Francisco
- 8 passed two bond initiatives last year. It's
- 9 really, it's helped galvanize a move towards
- 10 renewable electricity. One for over \$100 million
- in bonding authority for municipal buildings; and
- 12 the other for nonmunicipal sector.
- The division of labor, at the moment, in
- 14 San Francisco is that the Department of the
- 15 Environment deals with conservation and renewables
- 16 and efficiency for the residential and commercial
- 17 sectors. And the PUC deals with the municipal
- 18 load and a whole host of other things that Ed will
- 19 articulate in his discussion.
- 20 So we're also looking at things from
- 21 tidal to wave generation that can be developed
- 22 with other municipalities at various locations in
- 23 the Bay, and obviously of connection to the CEC
- 24 there is the PIER program that the Governor just
- 25 reauthorized.

1	The plan also projects how the City can
2	reduce its overall energy usage through aggressive
3	efficiency and conservation programs which by and
4	large the CEC has led the way in the most cost
5	effective methods of reducing the energy load.
6	The plan, fully implemented, would
7	decrease San Francisco's nitrogen oxide emissions
8	from nearly 600 tons yearly to about 150 tons.
9	And would cut particulate emissions in half.
10	A number of environmental health issues
11	associated with emissions including, as I
12	mentioned, asthma, respiratory problems, and even
13	cancer. The plan would reduce emissions of
14	greenhouse gas, carbon dioxide a nearly half
15	million tons.
16	San Francisco recently passed a
17	resolution to reduce greenhouse gas emissions by
18	20 percent, the goal being to get 20 percent
19	reduction by 2012 of 1990 baseline numbers. So we
20	have a fairly aggressive program there.
21	The CEC took the initiative during the
22	energy crisis to develop and implement the
23	campaigns to promote energy efficiency from your
24	"flex your power" campaign that you initiated to

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analyzing consumer behavior patterns.

1	What we'd really like to do in the next
2	step is to replicate the successes of these
3	programs in the San Francisco context. At the end
4	of the day we realize that we need to educate and
5	incentivize customers to be more energy efficient.
6	So, to date, what we've done is we've
7	developed working groups with the community, the
8	CEC, the CPUC, the ISO and PG&E to look at DSM,
9	distributed generation and transmission. So we're
10	really, at the staff level, engaged in coming up
11	with solutions and working how to get to the next
12	level.
13	We are working in the EJ sector. We've
14	already worked with the CEC to get rebates for
15	solar hot water heaters in the Bayview community,
16	and have a training program to promote training of
17	people in the Bayview to help them take advantage
18	of the renewable technology so that in the next
19	San Francisco revolution, which we hope to be
20	energy efficiency and conservation, everyone can
21	participate. Not just, as we saw in the dot.com
22	revolution, an elite few.
23	We have municipal legislation for the

We have municipal legislation for the commercial sector that we're developing in cooperation with the PUC. We've been working with

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the Chamber of Commerce in San Francisco very
actively.

From our perspective the next steps in the way the CEC can really help, and I think this is a good kind of context to lead into what Ed will talk about, which is the real specifics of the plan, San Francisco wants to target the downtown corridor office buildings for both efficiency and demand response programs. We need to use buildings and install them enhanced automation technologies to serve as really a case study.

What we'd like San Francisco to be is a model. We think we have all the necessary things from political will to educated consumer base, to a really motivated business community that both wants to save money and see San Francisco take leadership in this role.

We'd like to follow up with CEC contractors who are working to recruit participants for the enhanced automation demand response program, to try and include some participation from San Francisco. We want to continue working with the CEC Staff regarding metering from San Francisco customers so as to get

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1 a better overall picture of San Francisco's energy
2 use.
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- We're very different. And, you know, if you look at the "flex your power" program, we really need to tailor our own flex your power program, because energy usage and our peak demand is completely different. We don't really use air conditioners, even today it was pretty cold in San Francisco this morning, and very warm when you get up here. So we have some unique things that I think we ask to a) want to be aggressive in this area, but b) tailor it to San Francisco's needs.
  - Finally, to let you know where the plan is. There's already been a hearing at the board of supervisors. They have taken their first cut and there was a very long public input process.

    The next step will be for the board to approve the plan, and for the mayor to sign it.
  - So, that's where the plan is. It's pretty much in its final form. And I think it's a really appropriate time to go back to Ed and he can give the details. And I'll be available at the end to talk about any of the particular issues that you may have of interest or concern.

Thank you.

1	CHAIRMAN KEESE: Thank you.
2	MR. SMELOFF: Is that visible to
3	everyone? Let me take advantage of the high-tech
4	audiovisual equipment here, and go through with
5	you some of the details of our electricity
6	resource plan.
7	Let me start with the current situation
8	San Francisco, perhaps moreso than any other
9	community in the State of California, has some
10	unique vulnerabilities. We are, as you know, at
11	the tip of a peninsula, and we are limited in our
12	ability to import electricity into San Francisco.
13	We have about 65 percent of our peak
14	demand can be met through imports. We have to
15	produce the remainder within the City of San
16	Francisco.
17	All of the power comes up one
18	transmission corridor. There are six overhead
19	lines and one underground line that come through
20	the very same corridor from the San Mateo
21	substation to the Martin substation on the border
22	of San Francisco.
23	Our power plants are getting on in thei

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years. Hunter's Point is 44 years old. The main

unit at Potrero is 37 years old. These units,

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1	given their age, tend to have a higher forced
2	outage rate than do new, modern, combined cycle
3	power plants, or other new technologies. So, we
4	have some special both planning and operating
5	criteria that the ISO uses to assure reliability
6	for San Francisco.

San Francisco operates its system based on the assumption that you need to plan for the outage of both the largest generator and the largest transmission line coming into the City.

Our in-City plants, being old, also are not very efficient, and they're relatively dirty. We're facing some major challenges in 2005 in improving the emissions, reducing the emissions of NOx at both of the large facilities. And if we aren't able to achieve them, they would have a limited ability to continue to operate.

A concern that we share with the rest of the state is our increasing dependence on natural gas as a source of fuel for power generation, and the price volatility that that dependence triggers.

Visual here so you can see what the infrastructure looks like for San Francisco. You can see that the transmission currently comes in

1	from	t.he	San	Mateo	substation	t.o	the	Martin

- 2 substation, which is located at the Cow Palace.
- 3 We have two power plants, one at Potrero that has
- 4 three peaking units and one thermal unit; and then
- 5 a second power plant at Hunter's Point with one
- 6 peaker and a larger thermal unit.
- 7 We have beside the switchyards and
- 8 substations at the power plants there's three
- 9 other major points where the 230 and 115  $\ensuremath{\,\text{kV}}$
- 10 systems terminate, the Embarcadero -- and Mission
- 11 substations.
- 12 You'll see here there is a dotted line
- which is the proposed route of a new, very
- 14 important transmission line that PG&E is proposing
- to develop, and which they've just submitted an
- 16 application to the California Public Utilities
- 17 Commission.
- 18 This gives you the overview of the in-
- 19 City resources that are currently available. The
- 20 largest unit is the unit 3 at Potrero, 207
- 21 megawatts. You see each of these face future
- 22 restrictions in their NOx emissions. The peaking
- 23 units all use distillate and they're also fairly
- old, 26 years old; and they're limited in the
- number of hours that they can operate, to 10

1 percent of the hours over the course of a year.

2 We, as Jared mentioned, have been

3 engaged, thanks to the efforts of Commissioner

4 Geesman, the ISO passed a resolution several

5 months ago to trigger a working group between the

ISO Staff, PG&E and the City and community in San

7 Francisco to look at what is required to shut

down, remove the reliability must run contract

that would trigger the shutdown of the Hunter's

10 Point Power Plant.

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As a result of that initiative we've had a very cooperative effort with PG&E and they've done some power flow analysis, presenting kind of a high level view of that analysis. And this slide, the existing system in San Francisco, has the capability of serving 920 megawatts of load assuming that you are prepared to lose your largest generator and your largest transmission line.

When we look at Hunter's Point it's critical not just to look at San Francisco, but to look at the upper peninsula, as well, because Hunter's Point contributes to reliability in that area north of San Mateo substation. So I'm also showing you what the load-carrying capabilities

1	220	non+h	o f	$C \cap D$	Mateo.
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2	If Hunter's Point were to be shut down
3	immediately that would reduce our ability to serve
4	load to 850 megawatts in the City of San
5	Francisco, and in the northern peninsula down to
5	1160 megawatts.

If Hunter's Point is shut down and that new transmission line that I showed to you on the previous slide is developed, along with two other smaller projects, the upgrade of an existing line of 60 kV to 115 kV, and a cable, 115 kV cable between the Potrero and Hunter's Point stations, if those are put in place then the load-serving capability goes up to 1030 megawatts in the City.

Let me contrast that capability with what the forecast of the load is in San Francisco. You have peak demand, winter peak in San Francisco in January of 2001, of 870 megawatts.

Interestingly, just as an aside, the winter load appears to be growing more rapidly than the summer load, and we now have a probability of having a peak during the winter just as we have a similar probability of peak during the later summer months, September; we even have peaks can occur

into October when the weather is warmer in San

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2	You'll note here that the forecast that
3	PG&E prepared and submitted to the Energy
4	Commission has changed rather remarkably from
5	2001, which was done at the time when there was
6	robust economy and there was still a lot of
7	dot.com development in San Francisco, to August of
8	2002. And the projected demand is significantly
9	less, particularly in 2005 it drops almost by 100
10	megawatts.
11	This is an area where we want to, in the
12	future, collaborate with the Energy Commission in
13	the area of forecasting and then getting more

granular on projecting what the end use demand in various sectors are in the City.

Critical issues that we're facing in San Francisco and that were a major driver for the plant, we think they're of concern to the Energy Commission, is when can the Hunter's Point unit 4plant be permanently closed. The City has entered into an agreement back in 1998 with PG&E to do so. It was by Mayor Brown and PG&E. And it hinges on the determination by the ISO that the plant's no longer needed for reliability, and the ISO then can make a decision to remove the reliability

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1	must-run contract which it currently operates
2	under. Once that's done, then PG&E's agreed to
3	close the plant.
4	The second key issue for us is what's
5	going to happen with the large unit at Potrero.
6	Should it be retrofitted it's 37 years old now;
7	should it be retrofitted in 2005 or 2006 for
8	emissions? Triggering an investment, perhaps of
9	\$30 million or so. And then extending its life
10	into the subsequent decade. Or can we put
11	together a plan and resources that allow for the

phase-out of that older unit, as well.

So in developing the plan we did an inventory of what were the potential new resources within San Francisco and nearby San Francisco that could be developed in the timeframe of the plan, which was a ten-year timeframe, to 2012.

Let me mention we were aided in this process, we were ably aided by the Rocky Mountain Institute. And we have a consultant here, Joel Swisher, who is from the Rocky Mountain Institute who did a lot of the modeling for us, assisted us in this plan.

24 So we looked at resources 25 comprehensively, new generation, new transmission

1		-			
	resources,	and	demand	reduction	resources

2 For the generation resources we looked 3 at the opportunities to develop a large combined cycle power plant in the City. Specific 4 5 opportunities for cogeneration. We met with a number of thermal hosts and potential developers 7 to see where cogeneration could feasibly be developed. Two prominent sites we identified were 8 9 downtown to serve the downtown steam loop with the 10 district heating system. And the University of 11 California Mission Bay campus, which is where the new health science campus and potentially hospital 12 13 is going to be developed. They've already put in 14 place both a steam loop and a chilled water loop 15 at the existing facilities at Mission Bay. 16 We've also looked at the potential of siting smaller scale combustion turbines, LM6000, 17 18 similar to the technology that we put in place at 19 SMUD when I was here in Sacramento. We very aggressively looked at 20 21 opportunities for solar, both in the public 22

We very aggressively looked at opportunities for solar, both in the public sector, which we're initiating right now, and then in the private sector. And also fuel cells and other distributed generation technologies. A number of companies that are interested in

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1	distributed	generation	met	with	us	and	have

2 already identified several opportunities for DG in

3 the City.

For transmission I mentioned to you that
we looked at the upgrade of the 60 kV to 115 kV

power line. The new 230 kV line that PG&E is

proposing to bring in another route that is

separated from the existing San Mateo to Martin

route. It would give us some additional diversity

in our import capability.

Another resource we're very actively investigating and doing a lot of the detailed analysis now is a small combined cycle power plant out at the airport. It would be operated by the City. It would provide regional reliability. It would provide us some drought insurance for the Hetch-Hetchy water and power utility, which primarily relies on hydroelectric facilities. And it would provide additional security and reliability for the airport, since it could be operated in an island configuration.

In addition to that we've looked at opportunities outside of the City for developing other renewable energy technologies. Particularly wind technology, and we've discussed potential

1	wind	development	with a	number	of	developers.

And then lastly we're looking at the
potential long term for upgrades in existing
system at the Hetch-Hetchy where we have three

hydroelectric plants.

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And then very importantly, the potential for demand reduction. Mr. Blumenfeld mentioned in 7 his introductory remarks that the Department of 8 9 the Environment is looking at ways of increasing 10 public awareness of the continuing need for 11 conservation, load reduction in the City. Innovative ways to use codes and incentives in the 12 building sector for San Francisco to incent load 13 14 reduction.

And we're very much interested in the technology that Commissioner Rosenfeld strongly supports in real time metering and getting the appropriate rate structure in place so that we can provide incentives to reduce load, and do that on an economically efficient basis.

Let me get to our recommendations. I'm focusing first on the period of time prior to 2005. That really is a critical period for the City of San Francisco. We need to very aggressively put resources in place so that we can

1	shut	down	Hunter'	's	Point	prior	to	2005.

- 2 That's what the community expects from
- 3 us. We've had a number, as Mr. Blumenfeld
- 4 mentioned, a number of meetings in the community.
- 5 And there's a very strong impetus for us to shut
- that plant down before it would have to be
- 7 retrofitted or continue to operate using emission
- 8 reduction permits.
- 9 In order to shut down Hunter's Point we
- 10 need to put in place, our plan calls for putting
- in place 16 megawatts of load reduction, beyond
- 12 that that's already programmed into load
- 13 forecasts. Seventeen megawatts of small scale
- 14 generation, mostly combined heat and power; other
- distributed generation technologies.
- 16 And then the plan calls for the
- implementation of three LM6000, approximately 50
- 18 megawatt in size, combustion turbines.
- 19 That would enable us, in our view, and
- 20 we're testing this with PG&E and the ISO through
- 21 their power flow analysis, which is to be
- completed on October 23rd, but we're persuaded
- that that would allow us to close the 163 megawatt
- 24 Hunter's Point Plant with a much more flexible,
- 25 operationally flexible set of resources that would

- 1 provide a higher level of reliability.
- 2 It also, interestingly because the
- 3 plants are actually cleaner than the Potrero Unit
- 4 3, and thermally more efficient than Unit 3, and
- 5 operationally more flexible than Unit 3, would
- 6 allow the combustion turbines to be used ahead of
- 7 the existing Potrero Plant in meeting the
- 8 reliability needs of San Francisco.
- 9 Our goal would be to cooperate with the
- 10 owners of Potrero 3 to put together an
- 11 environmental dispatch protocol is that the new
- 12 combustion turbines could be dispatched jointly
- with Potrero 3, allow it to operate at a minimum
- load position for much of the year when the
- 15 combustion turbines would be operating at a higher
- 16 load.
- 17 Following 2005 our goal is then to put
- in place the two cogeneration plants, one in 2005
- and the next in 2006, which would further reduce
- 20 the need to rely on Potrero Unit 3. And we think
- 21 could eliminate the requirement that Potrero 3 put
- on SCR or other air quality retrofits.
- 23 We believe, and the power flow studies
- 24 will test this, if Potrero 3 can be closed, then
- 25 once the Jefferson Martin transmission line is

1	completed,	PG&E	has	slated	completion	for

- 2 September of 2005. I mentioned they just
- 3 submitted their CPCN to the Public Utilities
- 4 Commission.
- 5 While we think that's a laudable goal to
- 6 achieve that, we are assuming that there may be
- 7 some slippage in that schedule, and we want to
- 8 have sufficient flexibility in this plan that if
- 9 Jefferson/Martin is not completed by that time, we
- 10 still are able to reliably meet the electricity
- 11 needs.
- 12 A clear benefit of this plant is that
- 13 the new fossil generation is used fewer and fewer
- 14 hours through the time horizon of the plant as we
- 15 develop additional renewable energy resources and
- implement additional energy efficiency.
- 17 This is the big picture; this is what
- 18 the world could look like in San Francisco in the
- 19 year 2012 if we are successful in carrying out all
- of the measures in our plan.
- 21 We would reduce peak demand by 107
- 22 megawatts through load management energy
- 23 efficiency. We would have implemented three
- 24 operational flexible combustion turbines and put
- in place 100 megawatts of cogeneration.

1	Our goal for solar is to install 50
2	megawatts of solar. As the price comes down for
3	solar we will be installing more and more each
4	year. And was mentioned, the first project at the
5	Moscone Convention Center is 670 kilowatts. It
6	will be breaking ground in a couple of weeks. A
7	14-week construction period. It came in at \$6.5 a
8	watt, which we think is a very attractive price.
9	We think over time, as we build capacity for
10	solar, that price is going to become better and
11	better.
12	We slate 150 megawatts in wind energy to
13	be developed, most likely through power purchase
14	agreements with private developers of wind. And
15	then we have an additional 72 megawatts of small
16	scale distributed generation. We think in the
17	latter years that will be more likely to be fuel
18	cells; in the earlier years it's going to probably
19	be combined heat and power systems.

We also foresee the upgrade of the San

Mateo Martin line, and the new Jefferson to Martin

line.

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Just to show you graphically what this does in terms of environmental benefits: Reduces emissions of NOx by 73 percent. Cuts emissions of

1	PM10 in half. The largest achievement of these
2	benefits are achieved in the early years through
3	the closure of Hunter's Point and the reduction in
4	number of hours of operation of Potrero 3.
5	There's also a major greenhouse gas
6	benefit from the cogeneration systems, from the
7	renewable, through the increased improved
8	efficiency of the fossil units that would replace
9	Hunter's Point and Potrero. You can see that we
10	almost we achieve 500,000 ton reduction in
11	carbon dioxide emissions by 2012.
12	So let me summarize. We believe these
13	are the benefits of our recommended resource plan.
14	Major reductions in local air pollution.
15	Increased reliability of the electric service.
16	The single largest unit is reduced from 207
17	megawatts to 50 megawatts. There's an increased
18	redundancy. These are newer units that have
19	greater operational flexibility. And we start it
20	up and shut down relatively short period of time
21	compared to the long startup times for the
22	existing thermal units.
23	We increase local control over power
24	resources through more distributed technologies

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and more load responsive -- price responsive load.

1	This is an aggressive program for developing
2	renewables. We think that, if we can couple it
3	with measures being done here in Sacramento by
4	SMUD and in San Diego and elsewhere, we can
5	accelerate the development of advanced and
6	renewable technologies.
7	Very important for our community is the
8	dispersion of sources of generation, rather than
9	have them be concentrated in two neighborhoods
10	which are low income, predominately African-
11	American-Latino neighborhoods, the responsibility
12	and burden is dispersed more evenly throughout the
13	community.
14	And very importantly, it results in the
15	closure of the Hunter's Point Power Plant.
16	Implementation of our plan is going to
17	be a challenge. It's going to require a lot of
18	cooperation. We're going to need to partner with
19	a number of state agencies including your

be a challenge. It's going to require a lot of
cooperation. We're going to need to partner with
a number of state agencies including your
Commission. We're looking at community
aggregation in San Francisco. Our Assemblywoman
Carol Migden passed legislation that makes that an
option for San Francisco. I think our board of
supervisors is very interested in that
possibility.

L	We need to work closely with the CPUC in
2	developing an implementation plan and gaining an
3	understanding of how any historical procurement
4	costs should be allocated to the City.

We're very aggressive in supporting PG&E and the licensing of the transmission line. There are benefits for San Francisco and the upper peninsula of doing that. It provides a lot more security in the event of a catastrophic failure of the existing overhead lines.

From your Commission we're going to come forward. The cogen plants, based on their size, may or may not require licensing through the Commission. We do the three CTs as a package, as we intend to, we will need to come before you and get siting approval.

We, I think, also are interested in working with you in improving the load forecasting methodology that's being used by PG&E, and used in San Francisco, in identifying ways that we can implement efficiency measures in the types of buildings and end uses that we have in San Francisco.

We're talking with the California Power

Authority about financing the combustion turbine

1	power plants as one of the options, and through
2	their innovative Pulse program, providing
3	financing for some of the distributed generation
4	and solar technologies.

We have a very good relationship with the ISO Staff. I can't speak highly enough.

Their staff has reached out to us and been very cooperative in helping us in this plan and coming up with the strategy on closing Hunter's Point.

We need to, in terms of our airport power plant and the combustion turbines, understand how the RMR process is going to be administered in the future; what the transition will be from these reliability must run units to other mechanisms for providing mitigation, the local market power, and providing incentives for developing resources in the right places.

We're following very closely the new market rules that have been proposed both by FERC and the ISO.

And then lastly we seek to have a cooperative relationship with PG&E doing as much distributed technologies is going to require increased knowledge, both by the City, local and the end users, and PG&E of the choke-points on the

1	distribution	svstem;	where	we get	the	most	value

- 2 from solar and from distributed generation and
- 3 load reduction.
- 4 And we want to work cooperatively with
- 5 PG&E in targeting public goods funds to achieve
- 6 those goals.
- 7 So that concludes the presentation. And
- 8 both Jared Blumenfeld and I will be eager to
- 9 answer any of your questions.
- 10 CHAIRMAN KEESE: Thank you, Mr. Smeloff.
- 11 We had set aside 45 minutes. We started a few
- minutes late. We have a few moments for questions
- 13 here. Commissioner Rosenfeld, did you have any
- 14 comments?
- 15 COMMISSIONER ROSENFELD: I just want to
- 16 say I think it's really great that you guys came
- 17 up here and told us this exciting work. And I
- sure want to work with you to help get that 107
- 19 megawatts demand reduction.
- 20 And one of the things, of course, we
- 21 want to do is to start pilot programs as soon as
- 22 possible. So we'll know whether that's smoke or
- 23 whether it's real.
- 24 Bless you for coming up.
- MR. SMELOFF: Thank you.

1	CHAIRMAN KEESE: Commissioner Geesman.
2	COMMISSIONER GEESMAN: I, too, would
3	thank you for the presentation. As you noted, San
4	Francisco faces quite possibly the most
5	complicated electricity future of any of the
6	communities in California. But there are others
7	that do have their complications.
8	I would say that San Francisco is
9	blessed with an active community; a very
10	interested Mayor's Office and Staff. And I would
11	congratulate all of you for the work that you've
12	done. And hope that it can serve as a model for
13	other communities that are facing their own
14	particular energy issues, some of which seem to
15	boil up to this Commission in our siting cases.
16	And hope that our staff could attempt to foster
17	that same capability in other communities around
18	the state. Thank you.
19	CHAIRMAN KEESE: Thank you, Commissioner
20	Geesman. I will say that Commissioner Pernell and
21	I have noticed that you have an active involved
22	community in San Francisco.
23	COMMISSIONER PERNELL: Boy, have we.
24	(Laughter.)
25	CHAIRMAN KEESE: In other forums. And

1	we clearly have recognized that San Francisco has
2	been the most vulnerable community the last couple
3	years. And I'm really intrigued that you have
4	such a good solid proposal here to go forward with
5	and certainly being cooperative.
6	Commissioner Pernell.
7	COMMISSIONER PERNELL: I would just echo
8	everything that has been said, and particularly
9	I'm impressed with the involvement of the
10	community and your interest in environmental
11	justice in those communities that have had the
12	bulk of the pollutants in their community.
13	A couple of questions I have, though.
14	Can't let you off the hook. When I'm in San
15	Francisco you guys ask me all kind of questions.
16	(Laughter.)
17	COMMISSIONER PERNELL: One of them is
18	the plan is very ambitious. And as you know, this

COMMISSIONER PERNELL: One of them is the plan is very ambitious. And as you know, this Commission has been, along with the present administration, has been concerned about the vulnerability of San Francisco.

And we think it's part of our charge to insure that you have power there. This plan, as I understand it, is a ten-year plan. And I guess my question is if one of the proposed measures don't

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go through, is there a backup? Is there a
1
 2
         contingency plan? Is there -- if you don't get
 3
         the demand reduction you think you're going to
         get, is there some backup plan to fill those
 4
 5
         kilowatts or megawatts?
 6
                   MR. SMELOFF: We do think the plan has
7
         some flexibility built into it. We are -- if we
         simply counted on Jefferson/Martin coming into
8
9
         place in September of 2005 as PG&E has indicated,
10
         we probably could get by with doing less in terms
11
         of demand reduction and the new generation.
12
                   We don't think that's prudent, simply to
13
         put all our eggs in this transmission basket.
14
         We're supportive of what PG&E's doing. We put in
15
        place I think multiple things that we need to do
16
         in the near term with the combustion turbines,
         with demand reduction, supporting distributed
17
18
         generation.
19
                   In the event that we were not
20
21
         sufficient new generation in place, the
22
         vulnerability we face is continued operation of
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successful, say in getting the new generation, or 23 Hunter's Point for another year, possibly another two years. That would be a major disappointment 24 25 for the Mayor and the community.

1	PG&E indicates to us they believe that
2	they can operate the plant using emission
3	reduction credits for that period of time.
4	If we also were unsuccessful and you
5	could see in next year not moving forward
6	aggressively in this, then that would have an
7	impact on the way that the unit 3 at Potrero would
8	be looked at. Probably create more of an impetus
9	to retrofit that unit with SCR so that it can
10	operate at its full capacity into the future.
11	COMMISSIONER PERNELL: We would be
12	interested in your certainly I'm interested in
13	your photovoltaic program. And I know that SMUD,
14	also LADWP. And we're looking at additional
15	photovoltaics as it relates to some schools.
16	So perhaps we can sit down and talk
17	about doing some type of power purchase to bring
18	the price down. I noticed that you mentioned
19	that. And, you know, to have entities within the
20	state that are interested in this, and then have
21	some purchase of power, I think collectively
22	sitting down we can benefit the entire state with
23	those purchases, by bringing the price down.
24	MR. BLUMENFELD: Absolutely. I couldn't
25	agree more We need to make sure that we do these

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purchases in a coordinated fashion so we don't
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 2
         create bottlenecks and we actually do drive down
 3
         prices. And I think there's a lot of buying --
         California really should be the strategic market
 4
 5
         for the solar industry over the next decade, just
         as Japan has been in the last few years.
 7
                   MR. BLUMENFELD: Just to add on, in the
         environmental justice perspective, if we can
8
9
         promote the growth of the PV industries in, you
10
         know, communities that have generally been dealt
11
         with the negative environmental impacts, and
         actually create and stimulate jobs through the
12
         production of PVs in those communities. That
13
14
         would be an additional benefit.
15
                   CHAIRMAN KEESE: Thank you.
16
                   COMMISSIONER BOYD: Mr. Chairman.
                   CHAIRMAN KEESE: Commissioner Boyd.
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18
                   COMMISSIONER BOYD: Let me add my
19
         compliments to the City for engaging itself in a
         comprehensive plan. As one who sits still on the
20
21
         Governor's generation team, which was born in the
22
         darkest hours of January 2001, we always nervously
2.3
         watch the San Francisco situation. And it's
         gratifying to see that you've taken the bull by
24
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25

the horns.

L	You mentioned in your slide
2	presentation, and I've picked it up here in your
3	short-term action plan, and again you mentioned a
4	moment ago, the operation of Potrero 3 in an
5	environmental dispatch mode, and the use of
6	emission reduction credits.

And it seems rather key to your hopeful early retirement of that unit. And as reflecting on all that time on the generation team, and how during this crisis we really stressed the emission reduction credit banks of California to facilitate construction.

And I know there's some real serious questioning going on in the air quality community of the future emission reduction credits and the availability of them.

This is, unfortunately, going to be very vulnerable and -- or a key point, let's just say, to that plan.

So I know you'll be working with your Bay Area District, and they in turn with the Air Board and with this agency. And it is something that's one, very key to your plan; and then two, very key to, you know, to our economic expansion overall. In not only your community, but

4	
1	elsewhere.
_	CIBCMITCIC.

- 2 So that is yet another real high hurdle
- 3 I think we all face in dealing with this.
- 4 MR. BLUMENFELD: The added complication
- 5 is in order to get an alternative compliance plan
- 6 which would extend the life with outfitting
- 7 controls beyond January 1, 2005, you'd actually
- 8 need to use interchangeable ERCs.
- 9 And so they're even more restrictive and
- 10 less available. And you can't buy those for the
- 11 purpose of extending the life. So it is an issue
- 12 that we're dealing with in a cooperative fashion
- with the power company in San Francisco.
- 14 MR. SMELOFF: This will be cutting
- ground, you know, this would be the first of its
- 16 kind in putting together such a plan for the Bay
- 17 Area Air Quality Management District.
- 18 COMMISSIONER BOYD: Yes, having spent a
- 19 few years in the air quality business I know what
- you're up against. Wish you well.
- 21 CHAIRMAN KEESE: Thank you. Hang on for
- 22 a second, would you? We've received two requests
- 23 to make brief comments, and while this is an
- 24 informational presentation and we would generally
- 25 take those at the end, I think it's probably

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1 appropriate we take them at this time.
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- 2 So, I'm going to ask Mr. Karras, Greg
- 3 Karras.
- 4 MR. BLUMENFELD: Can I just make one
- 5 informational point to the public, that the report
- is available at www.sfenvironment.com. There's a
- full report, so anyone who's interested in getting
- 8 a copy, that's how they should do it.
- 9 CHAIRMAN KEESE: Thank you.
- MR. BLUMENFELD: Yeah.
- 11 CHAIRMAN KEESE: Give you a couple
- 12 minutes.
- MR. KARRAS: Excuse me?
- 14 CHAIRMAN KEESE: A couple minutes for --
- 15 MR. KARRAS: Oh, yeah, I can be very
- 16 quick. Thank you, Commissioner Keese,
- 17 Commissioners. I'm Greg Karras; I'm a senior
- 18 scientist with Communities for a Better
- 19 Environment. CBE is an environmental health and
- 20 justice organization with a strong base of
- 21 membership in southeast San Francisco, the
- community you've just heard about.
- I'm also familiar with the plant for a
- 24 couple of other reasons. One, I was the author of
- 25 a CBE report entitled "Power and Justice" that

1	came out almost a year ago that laid out options
2	and concluded that essentially the kind of plan
3	the City is proposing was technically feasible.

And we're glad to see we appear to have been right about that. I can't tell you how glad, because our members are very burdened. Some of the schools in the area of the Hunter's Point Power Plant, in some of the classrooms more than half the children carry inhalers, just to give you one example of what my bosses are telling me to work on.

I'm also the community co-chair of the power flow and forecasting group of ISO Staff, PG&E Staff, City Staff, CPUC Staff that was mentioned earlier.

In short, I guess within my two minutes, from the community perspective and an informed community perspective that so far has had a lot of independent analytical support, we find this plan to be feasible, cleaner, to have significant community support, and to be the only option that has been identified to date that is able to address the reliability crunch that's forecasted two to three years.

I think you heard a lot about the

1	community	process.	I	would	iust	sav	that	the	Citv

- 2 came out with options; they didn't tell us what to
- 3 do. They held hearings. They asked us what we
- 4 wanted; the community actually was given the time
- 5 to make a proposal. And except for the 150
- 6 megawatts of new generation, the City clearly
- 7 listened to us. That's why this plan has
- 8 significant informed community support. They did
- 9 the process right so far.
- 10 And in terms of being the only option,
- 11 that's in the short term. In the longer term I
- 12 guess the distributed generation's benefits are
- obvious compared to a single centralized power
- 14 plant. And who would want to have their whole
- 15 retirement portfolio in Enron? We want to
- diversify, that's the way to have reliability.
- 17 And in this case that's also the way to
- have environmental health and justice.
- 19 Thank you. I'd be happy to answer any
- 20 questions if you want.
- 21 CHAIRMAN KEESE: Thank you, appreciate
- 22 that.
- Mr. Carroll.
- 24 MR. CARROLL: Good morning. My name is
- 25 Mike Carroll; I'm an attorney with Latham and

Τ	Watkins	s, and	d I re	present	Mırant	Corpora	ation in a
2	siting	case	that':	s pendir	ng befor	re this	Commission.

Mirant's the current owner of the
existing Potrero Power Plant, and has filed an
application to add a new 540 megawatt generating
unit at that power plant. That unit is known as

unit 7.

We would second the comments of many of the Commissioners in terms of the initiative that this City has shown in developing a comprehensive energy plan. It is commendable initiative. We also agree with many of the goals and objectives set forth in the energy plan.

Where we part ways with the City Staff in a significant way is with respect to whether or not the proposal that they have set forth is likely to achieve those goals and objectives.

Unit 7 is conspicuously absent from the City's energy plan. I say that its absence is conspicuous because unlike most of the other proposals in the plan, it's the only proposal that's significantly through the permitting process, having undergone years of public review and environmental review.

Unit 7 also has lower capital costs,

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1 lower operating costs and is less polluting than
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- 2 the generating proposals set forth in the City's
- 3 plan.
- 4 One has to wonder why the City Staff
- 5 would fail to include unit 7 in its plan in favor
- of less efficient, higher emitting generating
- 7 units owned and operated by the City. It would
- 8 appear that we have City Staff that is intent on
- 9 building a public power empire. And that unit 7
- is not consistent with that objective.
- 11 One might ask, does the City have the
- 12 right to choose where it wants to get its power
- from. And if it wants to build a public power
- 14 empire, should that be its right? We think that
- the desires of the local jurisdiction are
- 16 important in the process. In this case, the
- 17 citizens of San Francisco, as opposed to the City
- 18 Staff, rejected in the last election public power.
- 19 And we think we know what the citizens of San
- 20 Francisco are looking for.
- 21 Yet, the City Staff presses on. And the
- 22 risks of pressing on are not insubstantial.
- 23 Consider the costs. According to the City's own
- 24 report, and its consultants back-up analysis, unit
- 7 has the lowest capital cost of all the new

	12
1	generation options of the plan. Unit 7 also has
2	the lower operating costs than proposed City-owned
3	generation. The higher costs of the City proposal
4	will be passed on to the ratepayers and the
5	taxpayers of San Francisco.
6	Consider the environment. Staff likes
7	to talk about all the
8	CHAIRMAN KEESE: Mr. Carroll, let me
9	I want to keep you to my two minutes, but I will
10	make an observation that you are correct. It was
11	very apparent to Commissioner Pernell and I that
12	the City did not bring up unit 7 either way. They
13	didn't say anything here positive and it didn't
14	say anything negative against it.
15	We will be down in the City within the
16	next few days to hear a lot more input from
17	individuals on that unit. I don't think this is
18	the forum to debate it.
19	MR. CARROLL: Understood. I won't talk
20	any more about unit 7. Let me just talk for a
21	couple minutes more, if I may, about the City's
22	plan
0.0	CHAIDMAN MEEGE . Charles

23 CHAIRMAN KEESE: Give you one.

MR. CARROLL: -- and ask that you

25 consider very carefully the feasibility. The plan

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calls for 150 megawatts of natural gas fired
combustion turbines in 2004. That's one or two
power plants subject to the jurisdiction of this
Commission, to be planned, approved, financed and
constructed by the end of 2004. A little over a
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year and a half away.

As if that weren't enough, the plan calls for ten megawatts of distributed generation to be installed over the same time period, with no apparent consideration as to where that's going to

And finally, just to make sure that there is plenty to do, their seven megawatts of solar generation, you've heard about the Moscone project, that's one-tenth of the planned solar generation in this proposal. That's a football-field-sized installation. That means we need ten more football-field-sized installations somewhere in the City by 2004.

go, or how it will be interconnected to the grid.

We think that given the naively ambitious objectives of the plan that it is highly likely that it will fail. Commissioner Pernell asked a very good question, what's the backup if the plan fails. It's an excellent question because we think it's very likely that certain

- 1 elements of the plan will fail.
- 2 The response was our greatest fear.
- 3 Well, what we would do under that scenario is
- 4 continue to operate Hunter's Point unit 4 using
- 5 credits instead of controls. And then we would
- operate unit 3, and we'd put the SCR on.
- 7 Well, at that point there isn't going to
- 8 be time to put SCR on unit 3. That's a multi-year
- 9 plan and construction process. So the backup plan
- 10 is to continue running existing inefficient, high-
- 11 polluting units. We don't think that's right. We
- 12 think a more balanced reliable plan is what the
- 13 City needs, including the very commendable
- 14 objectives for renewables, but with a base of
- fossil fuel generating plant to meet the
- 16 reliability needs of the City. And to free the
- 17 City Staff up to pursue the other, again, very
- 18 commendable objectives.
- 19 Thank you very much for your time.
- 20 CHAIRMAN KEESE: Thank you. This was an
- 21 informational presentation by the City. The
- 22 Energy Commission is not taking action on this.
- MR. CARROLL: I understand that, and I
- 24 realize we're the, you know, perhaps uninvited
- 25 skunk at the City's party here, but --

1	(Laughter.)
2	MR. CARROLL: we felt the need to
3	make our point.
4	CHAIRMAN KEESE: Thank you.
5	MR. CARROLL: And we have written
6	comments on the plan which I will leave with the
7	clerk, and we'll also docket in the Unit 7
8	proceedings.
9	CHAIRMAN KEESE: Thank you. And
10	finally, thank you, Mr. Smeloff and Mr.
11	Blumenfeld, we appreciate your presentation.
12	We will move on to item 3. Department
13	of Energy, Lawrence Berkeley National Laboratory.
14	Possible approval of contract 150-99-003,
15	amendment 2, for \$1,105,000 to conduct follow-on
16	research on real time grid reliability management.
17	MR. KONDOLEON: Good morning,
18	Commissioners. I am Don Kondoleon, the Manager of
19	the Commission's Transmission Program. And to my
20	right is Dave Hawkins, the R&D Project Director
21	for the California Independent System Operator.
22	I'm also the contract manager for a
23	multiyear, PIER funded, interagency contract with
24	Lawrence Berkeley National Lab whose goal is to
25	maintain and enhance grid reliability in

1	California in the wake of industry restructuring.
2	Now the focus of the contract has been
3	in the real time management area, however the
4	contract also funds activities in the area of
5	distributed energy resources and demand
6	responsiveness. And the Commissioners may recall
7	at the September 11th business meeting you
8	approved an amendment to this contract in the
9	areas of distributed energy resources and demand
10	responsiveness.
11	Now, the Commission has partnered in
12	this contact with CERTS, which is the Consortium
13	for Electric Reliability Technology Solutions and
14	its affiliates, with the California Independent
15	System Operator and with EPRI to develop, test and
16	deploy prototype software at the ISO.
17	Over the past two years the prototypes
18	have been successfully developed and tested at the
19	ISO, including a voltage management tool, a system
20	frequency and regulation tool, and a synchronized

phaser measurement tool.

This amendment before you today would allow further refinement of these and other tools, and deployment with the ISO operators.

The tools identified for funding in this

1	amendment were selected in consultation with the
2	ISO's vice president of operations in order to
3	identify those tools of critical importance to the
4	ISO at this time.
5	We seek your approval of this amendment,
6	and Dave Hawkins and I are here to answer any
7	questions you might have.
8	CHAIRMAN KEESE: Thank you. Do we have
9	any questions from the Commissioners?
10	COMMISSIONER GEESMAN: I'd make a motion
11	to
12	CHAIRMAN KEESE: Commissioner Geesman.
13	COMMISSIONER GEESMAN: approve the
14	contract.
15	COMMISSIONER ROSENFELD: Second.
16	CHAIRMAN KEESE: Motion by Commissioner
17	Geesman, second by Commissioner Rosenfeld.
18	All in favor?
19	(Ayes.)
20	CHAIRMAN KEESE: Opposed? Five to
21	nothing. Thank you.
22	MR. KONDOLEON: Thank you.
23	MR. HAWKINS: Thank you.

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contract is not subject to executive order D5502,

CHAIRMAN KEESE: I will note that this

24

25

1	which is true of all the other items that we will
2	take up today.
3	Item 4 has been moved to our agenda of
4	October 23rd. I'll mention at the same time that
5	item 7 is also over for a later hearing.
6	Item 5, renewable energy subject area
7	(PIER). Possible approval of fiscal year
8	2002/2003 funding recommendation for the targeted
9	biomass solicitation for biogas systems or
10	anaerobic digestion technologies.
11	DR. TIANGCO: Good morning,
12	Commissioners. My name is Valentino Tiangco,
13	Biomass Lead of the PIER renewables subject area.
14	On behalf of the renewable energy team
15	of the Public Interest Energy Research program I
16	would like to request for possible approval of the
17	five research and development demonstration
18	projects that will explore the production of
19	electricity using anaerobic digestion technologies
20	from California landfills, food processing plants,
21	livestock farms and potentially wastewater
22	treatment facilities.
23	These selected five projects are the
24	outcome of our targeted biomass solicitation for

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25

biogas systems or anaerobic digestion technologies

1	that were	released	l in Ap	ril th	his ye	ar.	And	the
2	renewable	energy s	ubject	area	Publi	c Int	teres	st

3 Energy Research program.

It is our goal in this targeted solicitation that we can help facilitate the accelerated development of biogas systems and anaerobic digestion technologies using biogas resources that we targeted.

I just mentioned them; namely landfill waste from California landfills and transfer stations. We have over 2000 landfills in the state and over 300 of them are actively accepting solid waste.

Livestock manure from dairy and swine operations. We have over 2000 farms in the state. Wastewater from waste treatment facilities, over 240 of them. And food processing waste, over 3000 plants, food processing plants, and manufacturing plants in the state.

As you know, in general, California is blessed to have abundant biomass resources that can help provide generation capacity to the state's electricity system.

For livestock manure alone, California
generates over 200 million dry tons, and only less

1	than 1 percent of the livestock manure generated
2	in the state is utilized for anaerobic digestion
3	technologies.

We envision that this anaerobic digestion technologies would be used for distributed generation applications that will eventually help California's electricity become more affordable, diverse, reliable and environmentally acceptable and safe.

When equipped with anaerobic digestion technologies integrated, of course, with environmentally acceptable -- we estimated that this biogas research could potentially produce up to 240 megawatts of electricity.

On July 25 of this year, the deadline of submitting proposals from this targeted solicitation, we received 17 proposals. Two proposals did not pass the screening process and got disqualified. And 15 proposals that passed the screening process were reviewed, evaluated and scored. And out of 15, five got passing score.

On September 5 of this year the R&D committee approved the five proposed awards and funding recommendations. The applicants, namely TIAX, LLC of Cupertino will demonstrate project in

1	Marysville landfill using hydrogen based biogas
2	fuel oil to drive a 75 kilowatt cogeneration unit
3	while reducing nitrogen oxide emissions.

SCS Consulting Engineers of Long Beach will demonstrate a new 250 kilowatt microturbines and their ability to use landfill gas as fuel.

Makel Engineering of Chico, California will demonstrate the biogas phase engine at Butte County landfill with greater efficiency while maintaining ultra low Nox emissions.

FlexEnergy, Inc. of Mission Viejo will demonstrate a flexible microturbine that will run on digester gas at California CalPoly San Luis Obispo, and a prototype fuel by landfill gas waste at Puente Hills landfill outside of Los Angeles.

And Valley Fig Growers, a food processor in Fresno, will construct and install an anaerobic digester at their facility. The methane produced in this facility will fuel a microturbine that will produce electricity and heat for use at the facility.

They are recommended to receive less than \$500,000 each with total amount of grant award of \$2,380,103. And providing over \$2.2 million of matching contributions.

1	We believe that this project, if it
2	becomes successful, will help accelerate and
3	extend the development of promising anaerobic
4	digestion technologies for distributed generation
5	applications in the state.
6	Thank you, and I'd be happy to answer
7	any questions.
8	CHAIRMAN KEESE: And this has been
9	approved by the committee, and I believe most of
10	the members have been briefed. Do we have any
11	questions?
12	COMMISSIONER ROSENFELD: I'm ready to
13	move it.
14	CHAIRMAN KEESE: A motion,
15	COMMISSIONER PERNELL: Second.
16	CHAIRMAN KEESE: Commissioner
17	Rosenfeld; second by Commissioner Pernell.
18	All in favor?
19	(Ayes.)
20	CHAIRMAN KEESE: Opposed? Adopted five
21	to nothing.
22	Point of privilege here. Mr. Tiangco is
23	a senior engineer in PIER, has a PhD and an MS in
24	energy; has been working on energy issues for ten
25	years and biomass for over 12. He has a diverse

	-
1	and international professional experience with
2	biomass energy systems, as a researcher,
3	consultant, lecturer, expert.
4	Leading up to the fact that the
5	Department of Energy's Biomass Award is a national
6	award by DOE through its biomass energy program.
7	Awarded for superior achievement in establishing,
8	promoting and implementing projects that
9	demonstrate the efficient use of biomass energy
10	resources and technologies.
11	Where is that award?
12	SPEAKER: It's right here.
13	(Laughter.)
14	CHAIRMAN KEESE: Mr. Simons, would you
15	please present it.
16	(Pause.)
17	CHAIRMAN KEESE: This award was
18	presented to Val at Bioenergy 2002 in September.
19	(Applause.)
20	(Presentation.)
21	DR. TIANGCO: Thank you.
22	CHAIRMAN KEESE: Thank you. Okay.
23	(Applause.)

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to see that your good work is appreciated by DOE

24

25

COMMISSIONER ROSENFELD: Val, it's great

1 and outside of the Energy Commission. S	30,
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- 2 congratulations.
- 3 CHAIRMAN KEESE: Item 6, geothermal
- 4 program. Possible approval of fiscal year
- 5 2002/2003 funding recommendation for the
- 6 geothermal resources development account. For
- 7 this solicitation seven projects are proposed to
- 8 receive awards of \$5,045,174. Good morning.
- 9 MS. SISON-LEBRILLA: Good morning. My
- 10 name's Elaine Sison-Lebrilla in the --
- 11 COMMISSIONER ROSENFELD: Can't hear you,
- 12 Elaine.
- MS. SISON-LEBRILLA: Hi, my name's
- 14 Elaine Sison-Lebrilla. I'm with the geothermal
- program; I'm the geothermal program manager.
- You have before you for your approval
- seven projects resulting from the geothermal
- 18 program solicitation released this past spring.
- 19 The program receives its funding from the
- 20 geothermal resource development account, also
- 21 known as GRDA.
- These projects, totaling up to
- \$5,045,174 are contingent upon the Energy
- 24 Commission receiving GRDA revenues projected for
- 25 fiscal year 2002/2003.

1	Funding for each project will not exceed
2	the specified amount requested in the formal
3	application. Projects will be funded in order of
4	ranking beginning with rank one. Most of these
5	projects are drilling exploration projects. Drill
6	and exploration represents a substantial portion
7	of geothermal development costs.
8	Some of the projects will also have
9	special conditions required as part of the funding
10	agreement. The following are the proposed grant
11	recipients in ranking order and their associated
12	special conditions:
13	Number one, Northern California Power
14	Agency. Their project is a dual horizontally
15	completed injection well to enhance geothermal
16	production at the Geysers.
17	Their conditions are that all permits
18	for this project must be received before funds can
19	be released.
20	If this project is not successful, NCPA
21	shall be responsible for all costs of abandoning
22	the well.

the well.

Number two, Coso Operating Company in

association with New Mexico Tech. Their project

is fluid inclusion stratigraphy, a new inexpensive

1		_			and the second s
1	method	ior	geothermal	reservoir	assessment.

- Number three, Mammoth Pacific Limited

  Partnership. Their project is demonstrating a

  microearthquake-based production and injection

  well-targeting technology. Their conditions is if

  this project is not successful Mammoth Pacific

  shall be responsible for all costs of abandoning

  the well.
- Number four, Calpine Corporation. Their
  project is drill exploration well 18-32 at the
  Pumice Mine Prospect in the Glass Mountain known
  geothermal resource area. Their conditions are
  that all permits for this project must be received
  in order for the funding to be released.
  - Also Calpine Corporation will release data pertaining to well logging and well testing.

    And also if this project is not successful Calpine Corporation will be responsible for all costs to abandoning the well.

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20 Number five, Electromagnetic
21 Instruments, Incorporated. Their project is the
22 geothermal exploration under the Salton Sea using
23 marine magnetotellurics. Their condition is since
24 the survey area appears to be in a wildlife refuge
25 Electromagnetic Instruments, Inc. must provide

1	appropr	riate p	permi	its	necessary	to	implement	project
2	before	funds	can	be	released.			

- 3 Number six, Weaverville Elementary School District. Their project is a geothermal 4 5 HVAC conversion. Their condition is the recipient shall bore a new bore hole and conduct tests as 6 7 recommended in the thermal conductivity report.
- Funding is contingent upon acceptable results. 8
- 9 Number seven, GSY-USA, Inc. Their 10 project is a magnetotelluric survey for resource 11 assessment and environmental mitigation in the Glass Mountain known geothermal resource area. 12 Their conditions is in addition to the release of 13 14 existing and final data, interpretation maps and 15 profiles of the survey data for the project site must also be released. 16
- Also, the grantee shall provide 18 documentation of the value of Calpine data being used as matching funding, recognizing that Calpine 19 holds the leases for geothermal development in the 20 21 Glass Mountain area.
- 22 Now, these projects total up to 23 \$5,045,174; matching funds are approximately \$5.5 24 million.
- CHAIRMAN KEESE: Thank you. Any 25

17

1	questions?
2	COMMISSIONER ROSENFELD: Ready to move
3	it.
4	COMMISSIONER GEESMAN: Second.
5	CHAIRMAN KEESE: We have a motion and a
6	second. And we have three individuals on the
7	phone who would like to comment on this. So we
8	will start with Janie Painter.
9	MS. PAINTER: Can you hear me?
10	CHAIRMAN KEESE: Yes, we can.
11	MS. PAINTER: I'm Janie Painter. I'm
12	calling from Mt. Shasta, California. And I'm
13	opposed to geothermal developments there
14	(inaudible). Anyway, I'm the Chairperson of the
15	Save (inaudible) Coalition. Our group (inaudible)
16	property owners, recreation users
17	COMMISSIONER ROSENFELD: Can't hear her.
18	CHAIRMAN KEESE: I'm sorry, can you hold
19	one second. Betty, can we get this volume up a
20	little?
21	(Pause.)
22	CHAIRMAN KEESE: Are you there?
23	MS. PAINTER: Yes.
24	CHAIRMAN KEESE: Okay, would you mind
25	starting over? We were having difficulty hearing

- 1 because of volume.
- MS. PAINTER: Okay, that's fine. I'm
- Janie Painter; I'm calling from Mt. Shasta,
- 4 California. I'm the Chairperson of the Save
- 5 Medicine Lake Coalition. Our group consists of
- 6 Medicine Lake property owners, recreation users,
- 7 environmentalists, and concerned citizens, alike.
- 8 Our flyers and newsletters reach several
- 9 thousand homes throughout California and
- 10 elsewhere. We've gathered over 2000 local
- 11 signatures opposing the geothermal development in
- 12 the Medicine Lake Highlands Glass Mountain KGRA.
- 13 Calpine Corporation (inaudible) support
- for geothermal projects in the Glass Mountain KGRA
- is false and a smokescreen for the CEC and other
- 16 agencies.
- 17 Calpine and GSY-USA are not being
- truthful in regards to the pumice mine. The area
- 19 Calpine and GSY-USA want -- for is not a pumice
- 20 mine. It is actually the Mount Hoffman Roadless
- 21 area. The Mount Hoffman Roadless area is an
- 22 environmentally sensitive area surrounded by a
- 23 pristine forest with unique plant and wildlife
- 24 species, geological formations and it's also -- a
- 25 tremendous cultural and spiritual significance for

4		_ '
1	$N \rightarrow + 1 \tau \tau \frown$	Americans.
_	Native	Americans.

2	The BLM has said that a new EIR/EIS
3	would have to be written before any, that's any
4	geothermal activity could even be considered in
5	the Mount Hoffman Roadless area. No permits or
6	approvals have been issued by the BLM or the Air
7	District for any exploration in the Mount Hoffman
8	Roadless area aka the pumice mine.
9	Calpine is using CEC ratepayer funding
10	to explore and eventually develop geothermal
11	projects which will not directly benefit or

to explore and eventually develop geothermal projects which will not directly benefit or provide California with the electricity produced. The Four Mile Hill and Telephone Flat development projects are power purchase agreements with the Bonneville Power Administration.

Calpine tries to rationalize their outof-state contracts by claiming that some of the
BPA power will go to (inaudible) Valley,
California, an area with a population of less than
1500 people. The economic value and benefit of
the pumice mine project has been overstated by
Calpine Corporation.

Calpine has promised in their application to make a power purchase agreement with the California Authority for the future. I

1	would like to remind the CEC Commissioners that if
2	it's not written into the terms of the grant, then
3	it is not enforceable, and thus Calpine has made

an empty promise.

I would also like to ask the CEC

Commissioners to investigate Calpine's contract

with the Bonneville Power Administration prior to

granting any award because it may be possible that

Calpine's contract with the BPA gives the BPA

first choice of any future power generation from

the area.

With their disappointing and insufficient (inaudible) of exploration well 8828 at Four Mile Hill Calpine seems to be grasping at straws to find a viable resource. Several (inaudible) and deep exploration wells were drilled at Telephone Flat in the 1980s and none of those wells proved a notable resource.

In light of the previous issues I would like to request that the CEC geothermal resources development account funds go to more worthy projects and that both the GSY-USA and Calpine solicitation for the pumice mine be rejected by the Commission.

Thank you very much.

1	CHAIRMAN KEESE: Thank you. May I ask
2	staff some questions. These grants are made
3	contingent upon Calpine receiving permits to take
4	this action, which they do not now have, is that
5	correct? Calpine does not have a permit to go
6	forward at this time, is that what I heard?
7	MS. SISON-LEBRILLA: That's correct.
8	Typically what happens is our moneys do not come
9	into play until they can prove to us that they
10	have permits.
11	CHAIRMAN KEESE: Correct. And whether
12	or not they have a permit is not something we can
13	give consideration in evaluating the
14	appropriateness of a project. That is taken care
15	of in another forum?
16	MS. SISON-LEBRILLA: That's correct. We
17	take a look at we look at the technical we
18	take a look at the technical merits of the
19	project, and we make the project's funding
20	conditional on whether or not they get all permits
21	required.
22	CHAIRMAN KEESE: And from the
23	information that's been submitted to us, there is
24	federal approval required before Calpine can go
25	forward?

1	MS. SISON-LEBRILLA: That's correct.
2	CHAIRMAN KEESE: Thank you. Do we have
3	any other questions here?
4	Thank you, Ms. Painter. Robert Carr.
5	MR. CARR: The Jefferson Democratic Club
6	of Siskiyou County. Can you hear me okay?
7	CHAIRMAN KEESE: Yes, we can.
8	MR. CARR: I would like to read to you
9	an approximately 300-word letter that was printed
10	in the editorials of The Mount Shasta Herald
11	several months ago, if I may?
12	CHAIRMAN KEESE: Thank you, go forward.
13	MR. CARR: Press release for all
14	Siskiyou County newspapers, letter to the editor,
15	Medicine Lake:
16	"The Jefferson Democrats sent to committee a
17	study proposal for the Medicine Lake
18	caldera" when I say caldera, please read
19	Glass Mountain. " for the Medicine Lake
20	caldera geothermal energy development
21	project."
22	"We looked at usage, cost, need, gain,
23	environment and precedent. We found the
24	project to be wanting on several levels. The
25	most pertinent point of contention was usage.

1	"The two proposed geothermal sites, which
2	are expandable to 11, are highly incompatible
3	with present and future tourism and
4	recreation. Sight, sound, smell, night
5	lights, heavy trucks, pollution are all
6	detractors to the natural outdoor type of
7	recreation and touring the area has to offer.
8	"The area already brings in a substantial
9	amount of tourist dollars to three counties.
10	Service stations, restaurants, motels, local
11	small business all benefit from the Medicine
12	Lake recreation area. The volcanic legacy
13	scenic byway, having just earned a federal
14	all-American road designation, will be
15	another financial boom to business,
16	especially as more and more citizens wish to
17	recreate in the United States."
18	"Our club is skeptical about public
19	financing for private gain. We're also
20	dubious of royalties offered to the county
21	while legislation like House Bill HR-2436,
22	title 3, if passed, would have reduced or
23	eliminated said royalties.
24	"Also, the cost of environmental degradation
25	has been foisted upon the taxpayers by

1	current administration policy. And Calpine,
2	now reduced to junk bond status, should not
3	be relied upon for financial responsibility.
4	"Energy needs are real and can be met by
5	conservation, efficiency standards,
6	alternatives such as solar, wind, ocean,
7	hydrogen alcohol and geothermal. Calpine's
8	new plant may be acceptable for Pittsburg,
9	California; however, the Medicine Lake
10	caldera should serve a different and more
11	important socioeconomic purpose."
12	"And, yes, the Native Americans have a valid
13	precedent for their historic usage claims."
14	"The Jefferson Democrat Medicine Lake
15	caldera statement reads: Whereas tourism is
16	the largest and fastest growing industry in
17	the world and in the United States, and
18	whereas California has many unique and
19	diverse ecosystems within which the Medicine
20	Lake caldera is a unique geological area, we
21	believe that the promotional use of the
22	Medicine Lake caldera for tourism and
23	recreation are more economically advantageous
24	to Siskiyou County than as a geothermal
25	energy site."

1	"Therefore, we strongly recommend that that
2	geothermal development of Medicine Lake
3	caldera be abandoned, and available resources
4	be directed towards tourism and recreation.
5	Sincerely, Robert Carr, Committee Chair,
6	Jefferson Democrats."
7	Thank you.
8	CHAIRMAN KEESE: Thank you very much.
9	Peggy Reich.
10	MS. REICH: My name is Peggy Reich; I'm
11	an environmental research associate for the Mt.
12	Shasta Bioregional Ecology Center. Can you hear
13	me okay?
14	CHAIRMAN KEESE: Very clear.
15	MS. REICH: Okay, great. Our ecology
16	center represents a constituency of approximately
17	4000 people who, over the years, have expressed an
18	interest in the preservation of outstanding
19	landscape in the region. The Medicine Lake
20	Highlands, which is referred to in the application
21	as the Glass Mountain KGRA, is one of those
22	distinguished regions. The cultural resources in
23	the area are unique, and they are also
24	nonrenewable.
25	What I would like to do today is to

1	outline	to	you	why	the	GRDA	funding	should	not	be

- 2 awarded to the GSY-USA and Calpine's application.
- 3 And I would ask that the CEC investigate the
- 4 omission of the significant information that is in
- 5 the application and the issues that are raised
- 6 here today.
- 7 The California Energy Commission has
- 8 authorization to make inquiry and verify the
- 9 information in the application and matters
- 10 contained in section H of the solicitation manual.
- 11 Calpine has failed to comply with
- 12 existing state, federal and local laws, rules and
- 13 regulations that are required in section 22 and
- section 23 of the general provisions certification
- and compliance section of their solicitation
- 16 manual.
- 17 Therefore, as Ms. Painter outlined
- 18 before, the 1995 environmental assessment that
- 19 Calpine relies on is outdated. The interesting
- 20 point here is that Calpine has notified the CEC
- 21 of their intent to drill a well, but they have not
- 22 notified the lead agency in this case. Neither
- 23 applicant has notified the BLM or the Air District
- of their intent or applied for the permit. This
- is a very important point, and Calpine has failed

1	to	notity	the	lead	agency	because	ΟÍ	the

- 2 implications that Ms. Painter pointed out.
- 3 The CEC does have a responsibility in
- 4 the verification of the information in the
- 5 application, and they have failed to comply with
- 6 the existing regulations.
- 7 As Ms. Painter also pointed out, that
- 8 neither proposal has the necessary permits for
- 9 geothermal activity. And given the extreme
- 10 controversy that extends beyond the local level
- 11 both applicants have a responsibility to have
- 12 their permit in place and the CEC to have them in
- 13 their possession before any funding is granted,
- 14 even on a conditional basis.
- Now yesterday I sent a fax that
- 16 contained a letter from the Advisory Council on
- 17 Historic Preservation. And I assume that most of
- 18 you -- or that the Commissioners did get a copy of
- 19 that?
- 20 CHAIRMAN KEESE: We have -- I have
- 21 received a copy. I believe it's been distributed
- 22 to all the Commissioners.
- MS. REICH: Okay, thank you very much.
- 24 What that letter basically does is lets the
- 25 Commissioners know that the issues here at the

_						_			
1	Medicine	Lake	Highlands	$\alpha \circ$	bevond	the	local	level	_

- 2 The Advisory Council came to the Medicine Lake
- 3 Highlands from Washington, D.C., as a federal
- 4 agency, to determine what should be done with that
- 5 area.
- The area, in 1999, pretty much the whole
- 7 caldera was determined to be a traditional
- 8 cultural district that was eligible for that
- 9 designation. And they concluded, after their
- 10 thorough evaluation, just as the Jefferson
- 11 Democrats did, that the proposed site for the
- 12 Telephone Flat development project was wrong, and
- 13 that the cost, the historic resources of Native
- 14 Americans in our nation are too high.
- This is really important because every
- 16 part of funding that goes from the CEC facilitates
- 17 the geothermal exploration and development that
- 18 would occur in this traditional cultural district.
- Both development projects that have been
- 20 put forth to date within the Medicine Lake
- 21 Highlands have been determined to be an
- 22 environmental justice issue because of the
- 23 discrimination factor and the impact to those
- 24 Native Americans.
- 25 Therefore, it would seem that the CEC

- 1 should seriously consider promoting further
- 2 projects that result in environmental justice
- 3 impacts.
- 4 In conclusion, I will just summarize
- 5 that we believe that Calpine, had they disclosed
- all the relevant information, that the CEC's score
- 7 for the project would well be below its current
- 8 average of 83 points out of 120.
- 9 Calpine has failed, as we said, to meet
- 10 the requirements of section 22 and 23 in the
- 11 general provisions. They have not secured their
- 12 permits. We recommend that the CEC deny the
- funding for this survey mapping for the geothermal
- 14 resources which is primarily in the caldera and,
- as Janie Hoffman (sic) said, includes Mount
- 16 Hoffman. It's not a pumice mine. It is the Mount
- 17 Hoffman Roadless area.
- Now that roadless area is 11,000 acres;
- 19 and the project that Calpine is proposing at
- 20 wellhead 1832 would require one mile of road
- 21 construction in that roadless area, and it would
- 22 require clear-cutting two and a half to three
- 23 acres in that roadless area. And it is
- inconsistent with the roadless area conservation
- 25 rule. They failed to tell you that.

1	They failed to inform the California
2	Energy Commission in their application that that
3	project was in a roadless area, and therefore had
4	to meet the requirements of the roadless area
5	conservation rules.
6	I would also like to say that I've
7	spoken with Michelle Berbitschevsky from the
8	Native Coalition
9	CHAIRMAN KEESE: She's going to speak
10	next.
11	MS. REICH: Oh, okay, good. I didn't
12	know she was on the line. But I just want to say
13	that I appreciate the California Energy
14	Commission, the Public Adviser folks are really
15	facilitating the Ecology Center getting the
16	information and being able to review it so that we
17	could make participate in a meaningful way with
18	the Energy Commission today.
19	And I would ask you to seriously
20	consider those comments that the Advisory Council
21	set forth. And that you delay granting any type
22	of conditional award to either one of these
23	projects.

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24

25

online.

And if you have any questions I will be

1	CHAIRMAN KEESE: Thank you. Before we
2	ask I have some questions for staff, also
3	but we'll go to Michelle Berbitschevsky first.
4	MS. REICH: Thank you.
5	MS. BERBITSCHEVSKY: Can everyone hear
6	me?
7	CHAIRMAN KEESE: Yes, we can.
8	MS. BERBITSCHEVSKY: I'm Michelle
9	Berbitschevsky; I'm the Executive Secretary for
10	the Native Coalition for Medicine Lake Highlands
11	Defense. And I want to thank the Commissioners
12	for this opportunity to be heard, especially to be
13	able to participate through this conference
14	calling system.
15	The Native Coalition is opposed to
16	Calpine's funding request on several counts. We
17	believe that Calpine failed to disclose to the
18	California Energy Commission the full situation as
19	it is relevant to Native American cultural values.
20	And because of this failure to disclose
21	the CEC cannot really assure that their
22	requirements, that the project meets all state and
23	federal regulations and that it has received all
24	the necessary approvals, that this cannot be
25	assured by the CEC. And so your we don't

1	believe this project meets your guidelines.
2	CHAIRMAN KEESE: I'm going to as you
3	are the last of our witnesses on the phone, as
4	soon as you're done I'm going to ask staff those
5	questions.
6	MS. BERBITSCHEVSKY: I wanted to add a
7	little more if that's all right?
8	CHAIRMAN KEESE: That's fine.
9	MS. BERBITSCHEVSKY: The project at
10	present relies on a 1995 environmental assessment.
11	And this '95 environmental assessment does not
12	cover the traditional cultural district. So we
13	have new conditions, under NEPA and CEQA, as well,
14	I believe, when there are significant new
15	conditions such as the presence of a traditional
16	cultural district, the NEPA process and CEQA
17	probably also, have to be supplemented.
18	The '95 EA stated that if there were
19	cultural properties this project would create a
20	significant impact. And because of this
21	statement, it is very likely, in fact it is a sure
22	thing that a section 106 process would be required
23	under the National Historic Preservation Act.
24	Any project that has a significant
25	impact would require a section 106 process. And

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1 the outcome of that 106 process can be to
2 recommend denial of the project.
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We believe Calpine did not disclose the

cultural significance of the area, and did not

disclose this situation to the CEC, and therefore

the project is extremely risky because of these

additional requirements that will have to be met.

The project was not covered in the most recent environmental assessment that came out in 2002. And this 1995 environmental assessment is no longer current. So we believe that the documentation required by the GRDA manual has not been met.

And, of course, Calpine has not obtained the permits from the Siskiyou County Air Pollution Control District, nor from BLM, which I believe CEC knows that.

So the Native Coalition is very much against funding this project. It would have great impact, serious impact on the traditional cultural values that are very sacred to Native Americans of the area.

And I'd be glad to answer any questions if you have any. And thank you very much for this opportunity.

1			CF	IAI	RMAN	KEESE:	Thank	you	for	joining
2	us	and	stay	on	the	line.				

We are a forum, a funding forum. And
there obviously is also a permitting forum that
allows these activities to go forward. We do not,
at the Commission level, have authority for
permitting, and do not take it up.

So I guess my question to staff and to the Committee that handled this and sent it forward is, I am sure you looked at the issue of appropriateness of a grant of funds to these two entities for a project in this area.

Could you answer some of the questions that have been raised, and in particular, I think what the Commissioners would like to know is, is this project appropriately before us at this time? Have circumstances changed such that you would switch your recommendation to us?

MS. SISON-LEBRILLA: Certainly there's a possibility that circumstances have changed.

Typically when we start this process -- it's a fairly long process, we started in the spring.

But the proposal before you is funding of this project conditioned on all permits for this project being received before funding can be

1	
	released

2	Now, if Calpine cannot get these
3	permits, cannot pass through these other processes
4	that are not within our control, then they will
5	get no funding.
6	And that is the proposal that is before
7	you.
8	CHAIRMAN KEESE: And none of the things
9	you heard today are a fatal flaw in presenting
10	that our contingent funding to us?
11	MS. SISON-LEBRILLA: I don't believe so,
12	because if they don't get I mean they are
13	for the permitting process. If they do not get
14	permits we don't give them any money. So, our

16 CHAIRMAN KEESE: Until the permits are

money doesn't come into play.

17 granted?

15

21

22

MS. SISON-LEBRILLA: Until the permits
are granted. And that is the condition that we
are bringing forward to this Commission.

CHAIRMAN KEESE: Thank you. Do we have any other questions? Yes, Commissioner Geesman.

23 COMMISSIONER GEESMAN: I wonder if you
24 would respond, Elaine, to the allegations that
25 Calpine misrepresented anything in their

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1 application for this funding.
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2	MS. SISON-LEBRILLA: At this point this
3	whole process and the solicitation process
4	typically is we receive a preapplication and a
5	final application. The Commission puts together a
6	technical advisory group. And the technical
7	advisory group for this particular solicitation is
8	three Commission Staff, one representative from
9	DOE and one representative from I believe it's
10	Mines and Geology, another sister agency in
11	California.
12	The tech did not believe that Calpine
13	had misrepresented themselves. But we did express
14	concern that possibly permitting may be an issue.
15	That is why we are bringing forward this project
16	for funding contingent on all permits being
17	issued. If there are no permits, or if none of
18	the if there are some concerns and questions
19	about the permits, then they will not receive any

21 release the funding.

22 COMMISSIONER GEESMAN: Mr. Chairman, in

23 Commissioner Rosenfeld's absence, I conducted the

24 R&D Committee hearing that took this up. And

25 permitting was not one of the criteria by which

money. They need to show us permits before we

20

1	+ h	ann1:an+:ana		0 1
1	these	applications	were	evaluated.

2	And there wasn't any indication that any
3	of the information submitted by the applicants was
4	inaccurate.

I don't think any of the comments that
we heard over the phone today really changed that.

I think there is a general question as to whether
we want to be making such a contingent award, but
the environmental permitting process was not one
of the criteria that the review committee applied
in determining technical merit of any of the
applications.

13 CHAIRMAN KEESE: Thank you.

Commissioner Boyd.

15 COMMISSIONER BOYD: Geothermal
16 development in this area has been an issue of
17 contention for several years, way predating my
18 sitting on this Commission. But I am very
19 familiar with the issues based on my previous
20 position in government.

I guess a question I have is, and this is pure speculation, going to be pure speculation on the part of staff, but do we have any indication of the possibility of geothermal development never being allowed in this area? Do

1	we have any indication from the other permitting
2	agencies based on the history of other
3	permitting agencies, such as the BLM, indicating
4	that they would never permit geothermal
5	development in this area, or any of the other
6	federal agencies that would have to do so?
7	MR. BEYER: I'd say that I'm John
8	Beyer; I was on the technical advisory committee
9	for these proposals.
10	I think staff is well aware that this
11	has been a controversial area, also, for quite
12	some time. We do know that in the area Calpine is
13	just completing one deep exploratory well.
14	This contentious issue has been going
15	on. Calpine has been making its case. The
16	current well is being drilled. I certainly expect
17	that permitting for the proposed well here will
18	also be contentious. And fair to say I don't
19	think we know the outcome.
20	We don't think that Calpine basically
21	failed to disclose information to us. We are

20 We don't think that Calpine basically
21 failed to disclose information to us. We are
22 aware of the situation. We evaluated the proposal
23 on what we regarded as its technical merits, its
24 cost considerations and prior studies by the
25 Commission that show that the Medicine Lake area

1	is potentia	ally a ve	ery sign	nificant	geo	thermal
2	resource.	This is	really	looking	at	geologic

3 considerations.

As has already been said, the permitting
is not something we were engaged in. And not one
nickel of Commission money goes to support that
effort for permitting, because they need to have
all permits in place before they receive any of
our money.

It was on that basis we evaluated, and we thought that technically this is very definitely a viable project to see if there is, in fact, a geothermal resource that can be tapped in that area. And that's an unknown question at this point.

16 COMMISSIONER GEESMAN: And I think

17 that's the basis, Mr. Chairman, on which we should

18 make our judgment. That was the approach that the

19 Committee took.

We don't have an evidentiary record in front of us as it relates to these permitting issues. That's in front of someone else.

And I think for us to try and make a judgment that reflects those considerations involves a lot of prejudgment, and it's beyond our

1	capacity	to co	nduct a	n mini	-permit	process	before
2	awarding	these	grants	· .			

- 3 The staff's approach is to make the 4 award contingent on receipt of full permit. I 5 don't think we can improve upon that.
- 6 CHAIRMAN KEESE: I -- having heard
  7 everything I think I would concur that what I hear
  8 staff saying is that we will -- that on a
  9 technical basis they would approve this.

And that the legitimate concerns raised by those who have written to us and those who have spoken on the phone are concerns that will be weighed against that technical evaluation in an appropriate forum. It's not here. We are not the appropriate forum for the weighing of those, the balancing of those interests.

But on the technical basis on which we are to judge, this meets the criteria.

19 COMMISSIONER PERNELL: Mr. Chairman.

20 CHAIRMAN KEESE: Commissioner Pernell.

21 COMMISSIONER PERNELL: Mr. Chairman, I

would agree with Commissioner Geesman, and just

say to those, our guests on the phone, that there

is an opportunity for you to be heard in the

25 permitting process.

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1	We have prided ourselves on our open-
2	door process when it comes to permitting and any
3	other action that this Commission takes. So that
4	even it has been said that this is not the venue
5	in which you should present your objections, but
6	there is opportunity to do so.
7	So I don't want you to be discouraged by
8	that, but I think what I'm hearing, at least up
9	here on the dais is that this is not the venue in
10	which to do it.
11	COMMISSIONER ROSENFELD: I'm comfortable
12	with that, too.
13	CHAIRMAN KEESE: Thank you.
14	Commissioner Rosenfeld, do you have
15	COMMISSIONER ROSENFELD: No, I just
16	I'm comfortable with the way that things are
17	going.
18	COMMISSIONER GEESMAN: I'll make the
19	motion, Mr. Chairman.
20	COMMISSIONER BOYD: I believe there's a
21	motion and a second
22	CHAIRMAN KEESE: I'm sorry, we did have
23	a motion and a second. Do we have anybody else in
24	the audience who cares to comment on this?
25	All right, hearing none, all in favor?

1	(Ayes.)
2	CHAIRMAN KEESE: Opposed? Adopted five
3	to nothing.
4	Thank you to those who joined us. I
5	recognize the legitimacy of your concerns.
6	Item 7 is over to a future meeting, as I
7	had mentioned.
8	Item 8, Hydrologic Research Center.
9	Possible approval of contract 500-02-008 for
10	\$300,000 to demonstrate a reservoir management
11	program at four northern California reservoirs to
12	optimize water resource management.
13	Good morning.
14	MR. O'HAGAN: Good morning. My name is
15	Joe O'Hagan. I'm in the PIER environmental area.
16	The contract before you is for \$300,000 with the
17	Hydrologic Research Center, which is a nonprofit
18	organization located in San Diego.
19	The proposed project entails
20	demonstrating at four northern California
21	reservoirs a new approach to runoff forecasting
22	and decision making in terms of balancing water
23	demands at these reservoirs.
24	The four reservoirs include Lake Shasta,
25	Trinity and Folsom, which are operated by the

Federal Bureau of Reclamation, and Lake Oroville, 1

which is operated by the Department of Water 2

3 Resources.

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The main thrust of the contract is to improve runoff forecasting through the use of 5 global climate models that would allow simulation 7 of a whole variety of potential runoff conditions, parameters that would cause that above and beyond 8 9 the historic database which is heavily relied on 10 now in terms of forecast predictions.

> It would also allow, once this information is downscaled to a watershed basis, because the global climate models are quite regional in scale, to provide a probability analysis, a statistical approach called ensemble forecasting where you look at the different parameters that go into the forecast and their individual probabilities to give overall reservoir management manager a feeling of what is the likelihood of "x" amount of runoff coming in a certain day or not.

> And the purpose of the forecasting efforts would be to identify one day, one week and a month or greater forecasts for the reservoir managers.

1	Also then they're going to enhance
2	decision making efforts for the reservoir
3	operators in terms of balancing water supply,
4	spilling water for flood control concerns, and
5	increasing hydro generation at these reservoirs.
6	These four reservoirs represent over
7	1700 megawatts of installed hydroelectric
8	capacity. And being multipurpose dams, of course,
9	the operators are always balancing flood control
10	concerns, retaining water for water supply, and
11	running water through the turbines for generation.
12	This project, we're proposing about
13	\$300,000. Calfed has already contributed \$600,000
14	to this project. And the National Oceanic and
15	Atmospheric Administration is giving \$500,000 to
16	this project.
17	CHAIRMAN KEESE: Thank you. I would
18	have a question. Is the entire funding of this
19	project going to these four reservoirs?
20	MR. O'HAGAN: Yes, to demonstrate.
21	CHAIRMAN KEESE: I know this is a major
22	issue further north, also. It's becoming a major
23	issue in some of the market design issues for, for
24	instance, RTO West, which is everything north
25	of basically everything north of California.

1	And how to develop the best management system that
2	can be relied upon in the grid.
3	Are we coordinating at all with them?
4	MR. O'HAGAN: No, we haven't. But the
5	thrust is to demonstrate this approach and
6	CHAIRMAN KEESE: Sure.
7	MR. O'HAGAN: you know, how it works
8	and
9	CHAIRMAN KEESE: So they can
10	MR. O'HAGAN: make alterations if
11	certain elements don't succeed. The contractors
12	have worked quite a bit throughout the nation with
13	noted authorities in this area. And this
14	information would be available, some being
15	copyrighted, to others in terms of reservoir
16	CHAIRMAN KEESE: How long is the
17	project?
18	MR. O'HAGAN: The contract is for three
19	years.
20	CHAIRMAN KEESE: Thank you. Any other
21	questions here?
22	COMMISSIONER BOYD: Just a comment, Mr.
23	Chairman.
24	CHAIRMAN KEESE: Commissioner Boyd.
25	COMMISSIONER BOYD: Just following up on

1	your question, I'm assuming that if we meet
2	success with this project it would be easy for
3	this agency to share that success with its peer
4	organizations throughout the west and with the
5	various associations of agencies to be used as
6	perhaps a model for their operations, as well, so
7	it
8	CHAIRMAN KEESE: Good, thank you.
9	COMMISSIONER BOYD: was a very
10	positive thing to do, based on my previous
11	experience.
12	CHAIRMAN KEESE: Thank you. Do I have a
13	motion?
14	COMMISSIONER ROSENFELD: I move.
15	CHAIRMAN KEESE: Motion by Commissioner
16	Rosenfeld.
17	COMMISSIONER GEESMAN: Second.
18	CHAIRMAN KEESE: Second by Commissioner
19	Geesman.
20	All in favor?
21	(Ayes.)
22	CHAIRMAN KEESE: Opposed? Adopted five
23	to nothing. Thank you.
24	MR. O'HAGAN: Thank you very much.

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CHAIRMAN KEESE: Item 9, State and

1	Consumer	Services	Agency.	Possible	approval	οf

- 2 contract 400-02-003 for \$350,000 to provide
- 3 technical assistance and training for K-12
- 4 schools.
- 5 This is essentially, as I understand it,
- 6 money in and then money out?
- 7 MS. ORLANDO: Yes.
- 8 CHAIRMAN KEESE: So we're receiving the
- 9 money from Consumer Services, and we're pushing it
- 10 out.
- 11 COMMISSIONER PERNELL: Mr. Chairman.
- 12 CHAIRMAN KEESE: Commissioner Pernell.
- 13 COMMISSIONER PERNELL: Mr. Chairman,
- 14 this item came before the Committee and was passed
- out of the Committee. And I would move the
- 16 item --
- 17 CHAIRMAN KEESE: Motion, Commissioner
- 18 Pernell.
- 19 COMMISSIONER PERNELL: -- unless there's
- 20 questions.
- 21 COMMISSIONER ROSENFELD: Second.
- 22 CHAIRMAN KEESE: Second, Commissioner
- 23 Rosenfeld. Any questions here?
- I'll ask a quick question. It's all
- 25 Central Valley, right?

1	MS. ORLANDO: Yes, there's eight
2	counties in the Central Valley that this contract
3	will serve.
4	CHAIRMAN KEESE: Put the proposal
5	together, is that the way it became Central Valley
6	oriented?
7	MS. ORLANDO: Yes.
8	CHAIRMAN KEESE: Thank you.
9	All in favor?
10	(Ayes.)
11	CHAIRMAN KEESE: Opposed? Adopted five
12	to nothing. Thank you.
13	Item 10, TIAX, LLC. Possible approval
14	of contract 600-02-003 for \$1,680,000 to provide
15	expert technical assistance for advanced
16	transportation technologies and nonpetroleum fuels
17	infrastructure et cetera.
18	MS. STONER: Hello; I'm Sherry Stoner;
19	I'm with the technology office in the
20	transportation division.
21	And what we're requesting today is to
22	approve a new contract with TIAX for \$1,680,000.
23	This contract will provide technical support for
24	advanced transportation technology and
25	nonpetroleum fuels infrastructure support, global

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1	climate	change	and	program	and	policy	development

- 2 in the advanced transportation area.
- If approved, the term of the contract
- 4 will be November 1, 2002 to October 31, 2005.
- 5 That's three years.
- The proposed contractor was chosen using
- 7 a standard request for proposal process. The
- 8 evaluation and selection committee found that this
- 9 proposal met the necessary technical score for
- 10 consideration. And the cost bid included
- 11 acceptable rates and hours necessary to complete
- 12 the scope of the work.
- 13 And I'm here to answer any questions.
- 14 CHAIRMAN KEESE: Thank you.
- 15 COMMISSIONER BOYD: Mr. Chairman.
- 16 CHAIRMAN KEESE: Commissioner Boyd.
- 17 COMMISSIONER BOYD: This item was
- 18 reviewed by the Transportation Committee,
- 19 Commissioner Geesman and myself. And recommended
- 20 to you by that Committee.
- 21 And I would so move its adoption.
- 22 CHAIRMAN KEESE: Motion, Commissioner
- Boyd.
- 24 COMMISSIONER GEESMAN: Second.
- 25 CHAIRMAN KEESE: Second, Commissioner

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1	Geesman.		
2		All in favor?	
3		(Ayes.)	
4		CHAIRMAN KEESE: Opposed? Five to	
5	nothing.	Thank you.	
6		Item 11, Salton Sea Unit #6 Geothermal	
7	Power pro	ject. Possible reconsideration of a	
8	Committee		
9		COMMISSIONER GEESMAN: Mr. Chairman.	
10		CHAIRMAN KEESE: Commissioner Geesman.	
11		COMMISSIONER GEESMAN: In Commissioner	
12	Pernell's	absence at our last meeting we seem to	
13	have had	a communication mix-up. I think the be	st
14	way to fi	x that would be to swap me out and swap	
15	him in as	the Associate Member on that Committee	
16	And I wou	ld so move.	
17		CHAIRMAN KEESE: Motion by Commissione	r
18	Geesman.		
19		COMMISSIONER BOYD: Second.	
20		CHAIRMAN KEESE: Second by Commissione	r
21	Boyd.		
22		All in favor?	
23		(Ayes.)	

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25 to nothing. Thank you.

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CHAIRMAN KEESE: Opposed? Adopted five

1	Minutes, we have the minutes of
2	September 25th.
3	COMMISSIONER GEESMAN: So moved.
4	COMMISSIONER PERNELL: Second.
5	CHAIRMAN KEESE: Motion, Commissioner
6	Geesman; second, Commissioner Pernell.
7	All in favor?
8	(Ayes.)
9	CHAIRMAN KEESE: Opposed? Adopted. And
10	the little birdie has indicated to me that within
11	the next month we should have all prior minutes up
12	to date.
13	Item 13, Commission Committee and
14	Oversight. Commissioner Pernell.
15	COMMISSIONER PERNELL: Mr. Chairman,
16	thank you. The Legislative Committee has and
17	you are a member of a couple of meetings ago we
18	had a report from the Legislative Committee,
19	however it wasn't the end of the signing period by
20	the Governor.
21	So we now have a complete report. And,
22	if I may, with the indulgence of the Committee,
23	just mention that there are 30 bills that we
24	either were tracking, sponsored or provided
25	amendments to. And those bills are in your packet

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with a little synopsis of them.
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                   And the other thing that I wanted to
 3
         mention that is not reflected in any of your
         documents is that those bills that we opposed
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         never got to the Governor's Desk. And I think
         that that's a tremendous achievement by our OGA
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7
         department.
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                   And I also want to just single out those
9
         members of the department and their supportive
10
         staff. And then we'll have Tim just briefly go
         over some of the bills that affected us the most.
11
                   First of all on the OGA's staff we have
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Tim Schmelzer, Cece Martin, Cece, stand up, and --

Tim Schmelzer, Cece Martin, Cece, stand up, and --

14 (Laughter - Applause.)

15 COMMISSIONER PERNELL: -- I like to

16 embarrass Cece. Also Michael Poe. And then on

17 the supportive staff there's Phil and Nicole

18 Darden who is a student.

So would we please give them a round of applause. They are batting 100.

21 (Applause.)

22 COMMISSIONER PERNELL: A 1000, yes,

23 whatever. We haven't lost on this one. But I'm

24 very very appreciative of the work that Tim has

done.

1	I, in my previous life, was a
2	legislative advocate; and we had vetoes or
3	we've had some signed, but we've never had 100
4	percent of our issues addressed in the way that
5	the Commission's have been addressed.
6	So I do applaud OGA for that. Tim.
7	MR. SCHMELZER: Thank you very much on
8	behalf of OGA, and of course, none of this is
9	possible without the support of the Commissioners
10	and staff, who was very helpful this year. So,
11	thank you.
12	Last time I was here I talked about all
13	the bills that had been passed. And as
14	Commissioner Pernell said, those bills have now
15	all been signed.
16	I'll briefly just go over some of what I
17	consider highlights of the session from the Energy
18	Commission point of view, and should there be any
19	questions about those I'll answer those.
20	Something that I know is keeping a lot
21	of our staff busy right now is the procurement
22	proceeding going on at the Public Utilities
23	Commission and AB57, the first bill on your list,
24	addresses that directly. Something that we worked
25	with the author on a little bit, and were able to

T	make amendments actually to another bill to
2	address some concerns that we had brought up in
3	that.

But this bill is the bill that provides
the guidance for the PUC to develop this
procurement plan process. And we're seeing that
being played out right now at the PUC.

Briefly, some of the other legislation that we were involved in: AB58 by Assemblymember Keeley, extended the net metering laws. And that's something that I know our renewable energy program staff will be working on into the future.

I'm going to skip around a little bit at this point. Mr. Smeloff had mentioned AB117 by Assemblymember Migden. This bill allows for an opt-out instead of having to opt-in for communities to aggregate their load for purposes of securing resources for their load. And thereby making community aggregation a lot more feasible. And the City of San Francisco is looking at that right now.

On the energy efficiency front,
Assemblymember Kelley carried AB1561. This bill
requires the Energy Commission to adopt a more
stringent water factor standard for residential

1	clothes washers by January 1, 2004. And our
2	efficiency staff will be looking at that when it
3	does its appliance standard work.
4	A trailer bill that was put forth by the
5	budget committees in the Legislature for the first
6	time in over 20 years allows the Energy Commission
7	to increase the surcharge that supports the
8	Commission. And that should really help us with
9	our budgeting into the future. And that's
10	something that I know the Commissioners will be
11	looking at every year. November of every year
12	we're given that option to adjust that surcharge.
13	COMMISSIONER PERNELL: And that I'm
14	sorry, that particular surcharge will bring in

approximately how much to the Commission?

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MR. SCHMELZER: Well, it provides the option for the Commission to raise the state energy surcharge up to one-tenth of a mill. If the Commission chose to raise it that entire amount, I believe that amounts to approximately \$25 million. But it's not required that it goes up at all, or to that maximum amount. But that's the potential --

COMMISSIONER PERNELL: But it gives us 24 25 the flexibility if we need it in the budget we can